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EXAMINER	
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ART UNIT	PAPER NUMBER
2613	

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No.	Applicant(s)	
	10/668,874	OVADIA ET AL.	
	Examiner	Art Unit	
	Shi K. Li	2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 November 2007*.

2a)☒ This action is **FINAL**. 2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-29 and 32-41* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-29 and 32-41* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/ are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *See Continuation Sheet*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Continuation of Attachment(s) 3). Information Disclosure Statement(s) (PTO/SB/08), Paper No(s)/Mail Date :4/10/2007,3/9/2007,12/19/2006,12/7/2006, 11/20/2006, 4/14/2005.

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

2. Claims 13-22 and 24-26 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qiao (U.S. Patent 6,956,868 B2) in view of Masuda et al. (U.S. Patent Application Pub. 2002/0059432 A1).

Regarding claim 13, Qiao teaches an integrated IP-over-WDM networking architecture utilizing label optical burst switching (LOBS). Qiao teaches in FIG. 1 a LOBS node comprising optical burst switching fabric (OBSX) and LOBS control. Qiao teaches in col. 4, lines 45-65 that a control packet is used to reserve bandwidth. Qiao teaches that if the reservation is not successful, a negative acknowledgement packet will be sent to the ingress LOBS node. The difference between Qiao and the claimed invention is that Qiao does not teach the details of the resource Cancellation message.

Masuda et al. teaches resource reservation in a communication network. Masuda et al. teaches in FIG. 28 that when a reservation is not possible (step ST133) then the temporary reserved resources are canceled (step ST 136). Masuda et al. teaches in FIG. 46 and FIG. 47 formats for messages. Each of these formats contains a flow ID. Masuda et al. teaches in paragraph [0031] that the flow ID uniquely identifies the session. In summary, a cancel message contains a flow ID, as taught by FIG. 46 and FIG, 47, which uniquely identifies the session. Also, it is common sense that when canceling a transaction, the transaction must be uniquely identified. One of ordinary skill in the art would have been combined the teaching of Masuda et

al. with the LOBS node of Qiao to include a session identification, e.g., flow ID as taught by Masuda et al., in a resource cancellation message because the session identification may be used to identify the temporary resources that have been reserved. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to include a session identification, e.g., flow ID, as taught by Masuda et al., in a resource cancellation message, in the LOBS node of Qiao because the session identification may be used to identify the temporary resources that have been reserved.

Regarding claim 14, Masuda et al. teaches in FIG. 35 a network and teaches in paragraph [0602] that the network can be a mesh network.

Regarding claim 15, Qiao teaches in col. 3, lines 25-30 edge and core nodes. Masuda et al. teaches in FIG. 35 edge nodes and core nodes.

Regarding claim 16, Qiao teaches optical burst switched network.

Regarding claim 17, Qiao teaches WDM.

Regarding claim 18, Masuda et al. teaches in FIG. 46 and FIG. 47 message formats.

Regarding claim 19, Masuda et al: teaches in FIG. 15 bandwidth managing table.

Regarding claim 20, Qia0 teaches in col. 4, lines 55-60 that negative acknowledgement is sent in the upstream direction.

Regarding claims 21-22, Masuda et al. teaches in FIG. 31 that the canceling request message is sent in the downstream direction along the lightpath.

Regarding claim 24, it is obvious that canceling a resource comprises removes the resource from the reservation table.

Regarding claims 25-26, it is common sense that a resource is not available because it has been assigned to other request or it is not working.

3. Claims 1-12 and 32-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qiao and Masuda et al. as applied to claims 13-22 and 24-26 above, and further in view of Freeman ("Telecommunication System Engineering" by R. Freeman, John Wiley & Sons, 1980, pp. 99-103).

Qiao and Masuda et al. have been discussed above in regard to claims 13-22 and 24-26. Regarding claims 1 and 32-33, the difference between Qiao and Masuda et al. and the claimed invention is that Qiao and Masuda et al. do not teach a computer program and a computer-readable medium. Freeman teaches in Section 12 stored-program control (SPC). Freeman teaches in p. 100 to store method steps as program in memory for providing instructions to controller or computer. One of ordinary skill in the art would have been motivated to combine the teaching of Freeman with the modified integrated IP-over-WDM networking architecture of Qiao and Masuda et al. because SPC is flexible and expandable such that it is easy to upgrade the network by rewriting the program. Thus it would have been obvious to one of ordinary skill in the art at the time the invention was made to use SPC, as taught by Freeman, in the modified integrated IP-over-WDM networking architecture of Qiao and Masuda et al. because SPC is flexible and expandable such that it is easy to upgrade the network by rewriting the program. Regarding claim 2, Masuda et al. teaches in FIG. 31 that cancellation messages are sent from one node to another along a path.

Regarding claim 3, Masuda et al. teaches in FIG. 35 a network and teaches in paragraph [0602] that the network can be a mesh network.

Regarding claim 4, Qiao teaches in col. 3, lines 25-30 edge and core nodes. Masuda et al. teaches in FIG. 35 edge nodes and core nodes.

Regarding claims 5 and 34, Qiao teaches optical burst switched network.

Regarding claims 6 and 35, Qiao teaches WDM.

Regarding claims 7 and 36, Masuda et al. teaches in FIG. 46 and FIG. 47 message formats.

Regarding claims 8 and 37, Masuda et al. teaches in FIG. 15 bandwidth managing table.

Regarding claims 9-10 and 38-39, it ~s common sense that a resource is not available because it has been assigned to other request or it is not working.

Regarding claims 11 and 40, Masuda et al. teaches in FIG. 31 that the canceling request message is sent in the downstream direction along the lightpath.

Regarding claims 12 and 41, Qiao teaches in col. 4, lines 55-60 that negative acknowledgement is sent in the upstream direction.

4. Claims 23 and 27-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Qiao and Masuda et al. as applied to claims 13-22 and 24-26 above, and further in view of Braden et al. (R. Braden et al., RFC-2205, "Resource ReSerVation Protocol (RSVP) - Version 1 Function Specification, IETF, September 1997).

Qiao and Masuda et al. have been discussed above in regard to claims 13-22 and 24-26. Regarding claims 1 and 32-33, the difference between Qiao and Masuda et al. and the claimed invention is that Qiao and Masuda et al. do not teach the details of the protocol. Qiao teaches in col. 5, lines 24-25 to use RSVP protocol for establishing the LOBS path. Braden et al. teaches RSVP. In particular, Braden et al. teaches in Sections 3.1.7 and 3.1.8 that error messages are sent

from the node that detects the errors and sent either the upstream or downstream direction. The messages contain sender description or the IP address of the node that detected the error. The messages also contain ERROR-SPEC that specifies the error such as the type of resource that is unavailable. One of ordinary skill in the art would have been motivated to combine the teaching of Braden et al. with the modified integrated IP-over-WDM networking architecture of Qiao and Masuda et al. because Qiao suggests RSVP. Thus it Would have been obvious to one of ordinary skill in the art at the time the invention was made to use RSVP protocol for canceling resource, as taught by Braden et al., in the modified integrated IP-over-WDM networking architecture of Qiao and Masuda et al. because Qiao suggests RSVP.

Response to Arguments

5. Applicant's arguments filed 1 November 2007 have been fully considered but they are not persuasive.

The Applicant argues that Masuda fails to disclose detecting an unavailability of a network resource along the lightpath after the network resource has been reserved. The Examiner disagrees. Masuda teaches in FIG. 28 step ST136 "processing of canceling temporary reservation". That is, the resource has been temporary reserved before the cancellation. In other words, the cancellation and, therefore, the recognition of the unavailability of the resource, are after the resource has been reserved.

Conclusion

6. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shi K. Li whose telephone number is 571 272-3031. The examiner can normally be reached on Monday-Friday (7:30 a.m. - 4:30 p.m.).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan can be reached on 571 272-3022. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

skl
11 January 2008

Shi K. Li
Primary Patent Examiner